

**FARRIS, MATHEWS, GILMAN, BRANAN & HELLEN, P.L.C.**

**ATTORNEYS AT LAW**

WILLIAM W. FARRIS  
HARLAN MATHEWS  
RONALD LEE GILMAN  
HOMER BOYD BRANAN, III  
TIM WADE HELLEN  
EDWIN DEAN WHITE, III  
CHARLES B. WELCH, JR.  
G. RAY BRATTON  
JOHN MICHAEL FARRIS  
O. DOUGLAS SHIPMAN  
D. EDWARD HARVEY  
REBECCA PEARSON TUTTLE  
EUGENE STONE FORRESTER, JR.

NASHVILLE CITY CENTER  
511 UNION STREET, SUITE 2400  
NASHVILLE, TENNESSEE 37219

FAX (615) 726-1776

PHONE (615) 726-1200

G. COBLE CAPERTON  
DEDRICK BRITTENUM, JR.  
BARRY F. WHITE  
PAUL E. PERRY  
BRIAN L. KUHN  
GREGORY W. O'NEAL  
STEVEN C. BRAMMER  
RICHARD J. MYERS  
HAROLD W. FONVILLE, II  
FRED D. (TONY) THOMPSON, JR.  
JANA LANE SOUTHERN  
OF COUNSEL  
HENRY H. HANCOCK

August 12, 1997

**HAND DELIVERY**

Mr. David Waddell  
Executive Secretary  
Tennessee Regulatory Authority  
460 James Robertson Parkway  
Nashville, TN 37243-0505

Re: Universal Service Generic Contested Case  
Docket No. 97-00888

Dear Mr. Waddell:

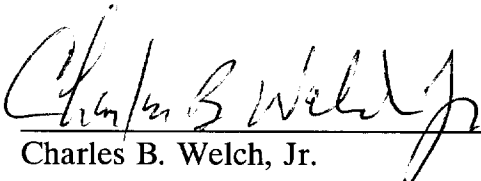
Enclosed for filing in the above-referenced case are the original and thirteen copies of the Direct Testimony of William J. Barta on behalf of the Tennessee Cable Telecommunications Association.

The TCTA is not filing testimony or a brief on all of the stated issues and will rely on its comments and the Statement of Stipulations and Contested Issues previously filed in this proceeding. The TCTA expressly reserves, however, the right to submit pre-filed rebuttal testimony and/or a rebuttal brief on these issues.

Copies are being served on counsel for known interested parties.

Very truly yours,

FARRIS, MATHEWS, GILMAN, BRANAN & HELLEN, P.L.C.

By:   
Charles B. Welch, Jr.

CBW,jr:cg

cc: Parties of Record

C:\WP51\MAIN\TCTA\LETTERS\WADDELL2.888

8

**DIRECT TESTIMONY  
AND EXHIBIT  
OF  
WILLIAM J. BARTA**

**ON BEHALF OF THE**  
**TENNESSEE CABLE TELECOMMUNICATIONS ASSOCIATION**  
**HENDERSON RIDGE CONSULTING, INC.**  
**ATLANTA, GEORGIA**  
**NOVEMBER 12, 1997**

**Re: Universal Service Generic Contested Case      )      Docket No. 97-00888**  
**(Phase I)**

<b>I.</b>	<b>QUALIFICATIONS</b>	<b>1</b>
<b>II.</b>	<b>PURPOSE AND SUMMARY OF TESTIMONY</b>	<b>5</b>
<b>III.</b>	<b>THE DETERMINATION OF IMPLICIT AND EXPLICIT SUBSIDIES</b>	<b>7</b>
<b>IV.</b>	<b>PRELIMINARY COST MODELING ISSUES</b>	<b>12</b>

**BEFORE THE  
TENNESSEE REGULATORY AUTHORITY**

## I. QUALIFICATIONS

**Q. Please state your name and business address.**

A. My name is William Barta, and my business address is 2744 Evans Dale Circle, Atlanta, Georgia 30340.

**Q. What is your occupation?**

A. I am the founder of Henderson Ridge Consulting, Inc., a regulatory consulting firm. The firm's practice focuses on the technical and policy issues confronting the telecommunications and electric utility industries.

**Q. Please provide a summary of your education and professional experience.**

A. From 1975 through 1978, I attended The Lindenwood Colleges where I received a Bachelor of Arts degree, cum laude, with a study emphasis in accounting. Upon graduation, I held accounting staff positions with a privately-held corporation and with a division of a large, public corporation. The primary responsibilities of these positions were to perform financial ratio analysis, cost accounting functions, and to supervise the monthly book close and preparation of the financial statements. In 1980, I enrolled in the graduate business program at Emory University and received my Masters of Business Administration with concentrations in finance and marketing.

After graduating from Emory University in 1982, I joined the Bell System as an Account Executive where I was responsible for the sale/lease of regulated

1 products and services to large business customers. In late 1983, I transferred to  
2 AT&T Communications where I provided a broad range of accounting regulatory  
3 support functions to the nine state Southern Region.

4  
5 From 1986 through 1988, I held various positions in the regulatory departments  
6 of Contel Corporation, an independent local exchange carrier. My responsibilities  
7 ranged from tariff support to ratemaking and rate design issues to line of business  
8 feasibility studies.

9  
10 In April 1988, I joined the firm of J. Kennedy and Associates, Inc., a regulatory  
11 and economic consulting firm. As a Manager at Kennedy and Associates, I  
12 directed or supported the ratemaking investigations of major telecommunications  
13 and electric utilities. My work covered rate design, revenue requirements  
14 analysis, and the determination of the appropriate cost of capital and other issues  
15 associated with traditional rate base/rate of return regulation.

16  
17 I have conducted management and compliance audits of regulated  
18 telecommunications and electric utilities. I have examined utilities' filings  
19 regarding other matters such as merger proposals, alternative regulation requests,  
20 affiliate relationships, network modernization proposals, and emerging  
21 competition.

22  
23 **Q. Do you hold any professional certifications?**

24  
25 A. Yes. I am a Certified Fraud Examiner and a Certified Public Accountant with an  
26 active license to practice in the State of Georgia.

1   **Q.     Please provide a brief overview of your experience that is germane to this**  
2       **proceeding.**

3  
4   **A.**     This proceeding is part of a trilogy of regulatory initiatives that are focused on  
5       achieving the pro-competitive objectives of the Telecommunications Act of 1996  
6       ("the 1996 Act"). Universal service reform is one of the areas specifically  
7       addressed by the 1996 Act. The other two components of the trilogy include  
8       local competition and access charge reform rulemakings.

9  
10       I have been involved and/or testified in State regulatory proceedings that have  
11       been initiated to examine local competition and universal service in response to  
12       the 1996 Act. With respect to local competition rulemakings, I have participated  
13       and testified in dockets to establish the appropriate wholesale percentage discount  
14       for resale purposes and to establish permanent prices for local interconnection and  
15       unbundled network elements. In these engagements, I have addressed policy and  
16       technical issues, including the analysis of the forward looking economic cost  
17       models which support the Total Service Long Run Incremental Cost ("TSLRIC")  
18       studies and Total Element Long Run Incremental Cost ("TELRIC") studies  
19       submitted by the incumbent local exchange carriers and interexchange carriers.

20  
21       I have directed and/or testified in numerous traditional rate base/rate of return  
22       proceedings that investigated the earnings levels and operations of local exchange  
23       carriers. Many of these engagements examined the impact on basic local  
24       exchange rates due to changes in rates or rate restructurings of other service  
25       offerings. My firm is currently developing policies, procedures, and internal  
26       controls to govern the administration and oversight of a State universal access  
27       fund. I have been retained as an expert witness in universal service proceedings  
28       that will be undertaken, or are currently underway, in other jurisdictions in  
29       response to the requirements of the 1996 Act. In addition, I have been retained to

participate and testify in upcoming access charge reform proceedings when a procedural schedule has been adopted.

Additional detail with respect to my qualifications can be found in Exhibit\_\_(WJB-1).

**Q. On whose behalf are you testifying in this proceeding?**

A. I am testifying on behalf of the Tennessee Cable Telecommunications Association (“TCTA”).

(This space intentionally left blank)

**II. PURPOSE AND SUMMARY OF TESTIMONY**

**Q. What is the purpose of your testimony?**

A. I have been requested by the TCTA to comment on two of the non-cost issues that will be addressed in Phase I of this proceeding. Specifically, my testimony discusses (1) the determination of implicit and explicit subsidies and (2) the issues affecting the development of a preliminary forward looking economic cost model that can be used to shape universal service reform.

**Q. Please summarize your testimony.**

A. Universal service support today is largely dependent upon a complex series of implicit subsidies that have developed over a period of years. But the factors that currently operate to keep basic telephone rates low will not be sustainable as the telecommunications industry transitions from a monopoly environment to a competitive market. The universal service support must be reformed in a manner that responds responsibly to the competitive pressures. In order to satisfy the statutory requirements of the 1996 Act, the support mechanisms ultimately adopted by the Authority must be sustainable, efficient, explicit, and promote competitive entry.

The amount of the implicit subsidies can be inferred from the difference between the forward looking economic cost estimate of providing service and the appropriate revenue benchmark. Although the consideration of these types of cost issues will be deferred until Phase II of this proceeding, there are some critical thoughts for the Authority to keep in mind. First, it is not necessary for the TRA to assume that the existing level of implicit subsidies should be continued on a prospective basis. The principles of competitive neutrality and fairness (i.e. the affordability of the supported services) suggest that the current level of universal



1 support may be overstated. Second, the TRA may wish to convert the implicit  
2 subsidies to explicit over a reasonable, three year phase-in period if the immediate  
3 restructuring of universal service support mechanisms proves disruptive to  
4 consumers and incumbent providers. The measures adopted by the TRA to reform  
5 the universal support system must prove to be sustainable and workable in the  
6 emerging competitive market in order for all Tennessee consumers to realize the  
7 benefits that Congress envisioned from the passage of the 1996 Act.

**III. THE DETERMINATION OF IMPLICIT AND EXPLICIT SUBSIDIES**

**Q. What is meant by the term “subsidy” when used in the context of universal service?**

A. In the provision of telecommunications services, it is generally acknowledged that a subsidy exists when the charges to, or revenues from, certain end users exceed the cost of the service received while other services are priced below cost. The magnitude of the implicit subsidy can be gauged to the extent that the rates do not reflect the underlying cost of providing the service.

**Q. Do the rates charged by the incumbent local exchange carriers for their service offerings reflect implicit subsidies?**

A. Yes. Narrowing the discussion of subsidy to the immediate concern of universal service, it is widely recognized that the goals of universal service -- high network subscribership levels at affordable rates -- are largely achieved through a series of implicit subsidies. The subsidies that have traditionally received the greatest attention from State and Federal regulatory authorities include the urban-to-rural subsidy, the business-to-residential subsidy, and the long distance-to-local service subsidy.

**Q. How have the rates of the incumbent local exchange carriers been structured to achieve the universal service goals of regulators?**

A. The three principal forms of universal service subsidy have been accomplished through geographic rate averaging, above cost business rates, and above cost access charges.

1 State requirements that local telephone rates be averaged across the state is the  
2 primary support mechanism for the urban-to-rural subsidy. Since the costs to  
3 serve customers in high density, urban areas is typically lower than the costs to  
4 serve rural subscribers, the geographic averaging of rates implicitly contributes to  
5 lower local telephone rates in rural areas.

6  
7 State regulators have created a business-to-residential subsidy by requiring  
8 businesses to pay more on a per line basis for local service than residential  
9 customers. The implicit subsidy can be said to exist because the cost to serve  
10 business subscribers is generally the same as, or may even be less than, the cost to  
11 serve residential customers.

12  
13 In addition, the rates charged for vertical features, such as touch tone, speed  
14 dialing, call waiting, and others, exceed the underlying costs of providing such  
15 services. To the extent that these services are priced above their competitive  
16 costs, they implicitly subsidize local telephone rates.

17  
18 The FCC and State regulators have designed interstate and intrastate access  
19 charges to recover certain loop costs that are not reflected in local rates. Certain  
20 usage based access charges have been viewed (and used) by regulators as a cost  
21 recovery tool to indirectly subsidize local telephone rates.

22  
23 **Q. Do you believe that the series of implicit subsidies supporting universal**  
24 **service objectives should be continued in light of the legislative and**  
25 **regulatory developments shaping the telecommunications industry?**

26  
27 **A.** I do not believe that the complex layer of implicit subsidies best suits the interests  
28 of regulators, consumers, and industry participants as the telecommunications  
29 market evolves. It most likely will not even be possible to sustain the implicit  
30 subsidies based upon the intent of legislators and regulators to promote

1 competition in all sectors of the market. As indicated in a prior response, the shift  
2 to a competitive market will undermine the incumbent provider's ability to  
3 continue to price certain services high in order to keep the rates for other services  
4 lower than they should be. Competitors will initially attack the lowest cost,  
5 highest margin market segments where the implicit subsidies keep rates above their  
6 competitive costs. It is not necessary for the costs and prices of the new market  
7 entrants to reflect the cross-subsidies of existing carriers who are required to serve  
8 all customers (i.e. low cost and high cost subscribers.)  
9

10 **Q. How can the size of the implicit subsidies be determined?**

11  
12 A. The nature and level of implicit subsidies embedded in the current rates of existing  
13 carriers have evolved over a long period of time. Thus, it will be difficult to  
14 identify the implicit universal service support effected through current rates.  
15 Nevertheless, the TRA should obtain a preliminary estimate of the implicit  
16 subsidies flowing from other services in support of universal service.  
17

18 Incumbent local exchange carriers should provide the revenues earned for each  
19 supportable service as defined by the TRA for the most recent twelve months  
20 prior to the date of the Authority's order in this proceeding. The incumbent  
21 carriers should also submit detailed cost studies identifying the types (i.e. plant  
22 specific, plant nonspecific, shared and common, and capital) and the level of costs  
23 incurred to provide the supportable services. The cost studies should be  
24 performed on a fully distributed cost basis and on a forward looking economic  
25 cost basis. The difference between the revenues earned and the costs incurred for  
26 all the supportable services can determine, for the purpose of this analysis, the  
27 implicit subsidies supporting universal service. By reviewing the incumbent  
28 carriers' operations under the two cost methodologies, the TRA can gain a  
29 perspective on the historical and current level of universal service support and the  
30 degree of subsidy that may be required prospectively.

1   **Q.     What guidelines should the TRA consider in developing rules to make the**  
2       **implicit universal support subsidies explicit?**

3  
4   A.     First, it is not necessary for the TRA to assume that the existing level of implicit  
5       subsidies should be continued on a prospective basis. Second, the Authority may  
6       wish to convert the implicit subsidies to explicit over a phase-in period.

7  
8       In the first instance, to perpetuate the level of current subsidies may present  
9       barriers to entry for new competitors and be detrimental overall to the  
10      development of competition in the telecommunications market. The Joint Board  
11      and the FCC concluded that the principle of competitive neutrality should guide  
12      the reform of universal support mechanisms and rules (FCC Report and Order,  
13      CC Docket No. 96-45, May 7, 1997, paragraph 21).

14  
15      Consistent with the principle of competitive neutrality, the transition from implicit  
16      to explicit subsidies should examine the affordability of the supportable services.  
17      The overlay of a well-conceived affordability threshold can effectively lower the  
18      aggregate size of the Tennessee universal service fund and more appropriately  
19      target the recipients of the support.

20  
21      The TRA retains the authority to phase-in explicit subsidies in support of  
22      universal service. The Commission may conclude from the record established in  
23      this proceeding that the immediate elimination of the implicit universal support  
24      mechanisms may prove disruptive to consumers and incumbent providers. A  
25      phase-in period of three years to convert implicit subsidies to explicit subsidies is  
26      reasonable. At the end of the phase-in period, the TRA can review the  
27      effectiveness of its universal service policies.

1   **Q.     What actions do you recommend that the TRA take in making universal**  
2       **service support mechanisms explicit?**

3  
4   **A.     The TRA should determine the maximum level of universal service support based**  
5       **upon the difference between the forward looking economic cost of providing**  
6       **service and the appropriate revenue benchmark. The maximum level of support**  
7       **should be further refined for the affordability criteria adopted by the TRA.**

8  
9       Once the level of subsidy has been determined, it is important that the recovery of  
10      costs for the defined supportable services follow cost causation principles to the  
11      greatest extent possible. For instance, usage based charges should not be  
12      established to recover costs that are not incurred or tied to usage sensitive  
13      facilities.

14  
15      The forward looking economic cost studies that will be submitted in Phase II of  
16      this proceeding should allow the TRA to assess whether certain implicit subsidies  
17      remain viable during the transition to a competitive environment and to identify  
18      the supportable services and underlying cost elements that can more readily be  
19      structured as explicit support mechanisms.

**IV. PRELIMINARY COST MODELING ISSUES**

**Q. Should the cost studies submitted in support of universal service be company-specific or generic?**

A. The forward looking economic cost models used to determine universal service support requirements should be relied upon to develop a competitively neutral estimate of the cost of providing the supported services. One of the principles inherent in a forward looking economic cost approach is that the cost estimates ultimately developed represent the costs of any carrier providing universal service in the defined service area. The models that are likely to be presented in this proceeding are sophisticated enough to readily accommodate changes in high level inputs deemed to be company-specific (e.g. the cost of capital, depreciation factors, and tax rates).

The preparation and review of company-specific cost studies would place unnecessary administrative burdens upon the TRA, existing carriers, and other parties. Thus, there is no need for the TRA to require company-specific forward looking economic cost studies to determine the subsidy required to support universal service in Tennessee.

**Q. What is the appropriate territorial scope of universal service rates?**

A. The TRA should review the results of the forward looking economic cost studies prior to making its decision regarding the proper territorial scope of universal service rates. The Authority should not be held to a commitment in Phase I of the proceeding that universal service rates developed statewide by carrier, by service area, or by category of support is the preferred method to achieve universal service reform. The merits of each alternative, as well as others that may be

1 raised in the docket, should be reviewed once the forward looking economic cost  
2 studies have been submitted.

3  
4 **Q. What is the proper level to which deaveraging should be applied in the cost**  
5 **studies?**

6  
7 A. First, it is important that new market entrants be able to define their service areas  
8 according to geographic units that make economic sense and are consistent with  
9 their facilities serving arrangements. This flexibility releases the new competitors  
10 from potential barriers to entry posed by the requirement of having their service  
11 areas tied to those of the incumbent providers. The competing providers may  
12 define their service areas according to the existing exchange of an incumbent  
13 provider or perhaps a smaller area, such as a Census Block Group ("CBG").

14  
15 The forward looking economic cost models likely to be sponsored in Phase II of  
16 the proceeding have the ability to disaggregate the costs of providing universal  
17 service at a very detailed level. Cost estimates can be developed statewide, at  
18 the wire center level, or at a Census Block Group level. At this point in the  
19 proceeding, it cannot be concluded that the lowest level of disaggregation upon  
20 which cost estimates are developed represents the optimal determination of  
21 universal service support requirements. The Authority should carefully weigh  
22 whether the precision from deaveraging costs below the wire center level is  
23 meaningful and is consistent with the stated goals of universal service reform.

24  
25 **Q. Should rural and nonrural areas be combined or separated in the cost**  
26 **studies?**

27  
28 A. The rural areas of Tier 2 incumbent local exchange carriers are generally  
29 considered high cost service areas due to low density and unique cost  
30 characteristics (i.e. longer loop lengths). The combination of high cost, rural



1 areas with nonrural areas could result in misleading universal service support  
2 requirements as the special cost considerations of rural areas introduce an upward  
3 bias to the average cost estimates. The nonrural, high density markets are also the  
4 most likely to be the first contested and, presumably, the first to benefit as  
5 competitive forces drive implicit subsidies out while exerting downward pressure  
6 on prices. If the costs to provide service in these areas reflect an implicit subsidy  
7 for high cost areas, the growth of competition may be slower than would  
8 otherwise be the case. This proceeding should focus on the universal service  
9 requirements for nonrural areas and consider the requirements of rural areas  
10 separately.

11  
12 **Q. Should universal service cost studies be based on cost studies used to**  
13 **establish permanent prices for unbundled network elements?**

14  
15 A. The universal service cost studies should reflect the forward looking economic  
16 cost principles that have been applied in the determination of costs for unbundled  
17 network elements. It is expected, however, that differences between cost  
18 estimates developed for unbundled network elements and the cost estimates  
19 developed for universal service will arise. For instance, the reasonable allocation  
20 of joint and common costs may differ between the two types of cost studies. It is  
21 recommended that stand-alone, forward looking economic cost studies for  
22 universal service be developed as part of the Phase II record.

23  
24 **Q. Should costs be developed on a combined or an intrastate basis?**

25  
26 A. The forward looking economic cost estimates should be developed on a combined  
27 basis and use state specific factors for such items as fill factors, labor rates, cost of  
28 capital, depreciation factors, and additional areas where state specific factors  
29 enhance the accuracy of the cost study results.

1    **Q.**     **Does this conclude your testimony?**

2  
3    **A.**     **Yes.**

**Re: Universal Service Generic Contested Case      )      Docket No. 97-00888**  
**(Phase I)**

**EXHIBIT**  
**OF**  
**WILLIAM J. BARTA**

**ON BEHALF OF THE**  
**TENNESSEE CABLE TELECOMMUNICATIONS ASSOCIATION**  
**HENDERSON RIDGE CONSULTING, INC.**  
**ATLANTA, GEORGIA**  
**NOVEMBER 12, 1997**

**WILLIAM J. BARTA**  
**President, Henderson Ridge Consulting, Inc.**

**EDUCATION**

<b>Emory University</b>	M.B.A. (1982)
Marketing and Finance	
<b>The Lindenwood Colleges</b>	B.A. with Honors (1978)
Business Administration and Accounting	

**PROFESSIONAL CERTIFICATION**

Certified Public Accountant  
Certified Fraud Examiner

**PROFESSIONAL AFFILIATIONS**

American Institute of Certified Public Accountants  
Georgia Society of Certified Public Accountants  
Association of Certified Fraud Examiners

**EMPLOYMENT HISTORY**

1988 - 1995:	J. Kennedy and Associates	Manager
1986 - 1988:	Contel Corporation	Financial Planning Coordinator
1982 - 1986:	AT&T	Financial Analyst and Account Executive
1981	Simmons, U.S.A.	Special Projects Staff (summer internship)
1979 - 1980:	Gould, Inc.	Senior Accountant
1978 - 1979:	SCNO Barge Lines, Inc.	Staff Accountant

**REPRESENTATIVE EXPERIENCE**

**Management Audits:**

Conducted comprehensive and focused management audits of a major electric investor owned utility, a generation and transmission electric cooperative, distribution electric cooperatives, a Bell Operating Company, and independent local exchange carriers.

**Alternative Regulation Assessments:**

Assessed the ratemaking and competitive impact of the incentive regulation proposals advanced by an electric investor owned utility, AT&T, and a Bell Operating Company and assisted in the development of a state public commission staff's response to the state legislature's proposed local exchange competition plan.

**Merger Evaluations:**

Evaluated the administrative and operational synergies projected in a merger between two electric investor owned utilities and the level of savings and operational efficiency to be achieved from the combination of separate subsidiaries within a Bell Regional Holding Company.

**Demand Side Management Program Analyses:**

Performed a comprehensive review of the assumptions used in the development of proposed Demand Side Management ("DSM") programs and the benefit/cost ratios of implementing proposed DSM programs as determined by standard regulatory tests. Of particular interest was the nonregulated revenue potential resulting from a load management program designed to achieve spinning reserve status by providing real time communications between the residential customer and the operating dispatch center.

**Affiliate Transactions Reviews:**

Conducted extensive cost allocation studies and transaction audits of a Bell Regional Holding Company's on-going affiliate transactions, the sale of an electric utility's generating facilities to (and subsequent participation in) a joint venture between the utility and three of its largest industrial customers, the integrated sale of an electric utility's mining operation and long-term coal purchase agreement, and the provisions under which a nonregulated subsidiary of an electric utility would market the excess telecommunications capacity of a Demand Side Management program.

**Accounting and Finance Investigations:**

Performed comprehensive earnings investigations and revenue requirements studies of AT&T, a Bell Operating Company, independent local exchange carriers, electric investor owned utilities, a generation and transmission electric cooperative, and electric distribution cooperatives.

**PROJECT PARTICIPATION AND RESULTS**

In the engagements discussed, I participated as an Assistant Project Manager and/or a Project Director and Task Leader. Most of the engagements required appearances as an expert witness in order to support the project's findings, conclusions, and recommendations. In addition, I had primary responsibility for business development of the telecommunications practice.

**Expert Testimony Appearances**

<u>Date</u>	<u>Case No.</u>	<u>Jurisdiction</u>	<u>Company</u>	<u>Subject Matter</u>
July 1989	333-272	Louisiana	South Central Bell Telephone & Telegraph	Realized and projected rates of return.
August 1989	U-17970	Louisiana	AT&T Communications	Earnings investigation, network modernization, and alternative regulation.
October 1989	U-17282	Louisiana	Gulf States Utilities	Operating expense analysis and nonregulated joint venture evaluation.
January 1990	U-17282	Louisiana	Gulf State Utilities	Regulatory treatment of gain on sale of utility property.
July 1991	4004-U	Georgia	GTE Telephone	Network modernization and depreciation represcription.
October 1991	U-17282	Louisiana	Gulf States Utilities	Results of comprehensive management audit.
Dec. 1992	U-17949 Subdocket A	Louisiana	South Central Bell Telephone and Telegraph	Network technology and modernization and construction program evaluation.
Dec. 1992	U-19904	Louisiana	Entergy/Gulf States	Non-fuel O&M merger related synergies.
March 1993	93-01-E1 EFC	Ohio	Ohio Power Company	Accounting and regulatory treatment of the sale of an affiliate's investment.

**Expert Testimony Appearances - continued**

<u>Date</u>	<u>Case No.</u>	<u>Jurisdiction</u>	<u>Company</u>	<u>Subject Matter</u>
March 1993	U-19994	Louisiana	Entergy/Gulf States	Merger related synergies.
August 1993	U-19972	Louisiana	Ringgold Telephone Company	Earnings investigation, network modernization, and construction program.
October 1993	U-17735	Louisiana	Cajun Electric Power	Earnings investigation.
May 1994	U-20178	Louisiana	Louisiana Power & Light Company	Analysis of Least Cost Integrated Resource Plan and Demand Side Management programs.
October 1994	5258-U	Georgia	Southern Bell Telephone & Telegraph	Price regulation and incentive rate plan review.
June 1995	3905-U	Georgia	Southern Bell Telephone & Telegraph	Rate design and alternative regulation.
June 1996	96-02-002	California	Pacific Bell Telephone & Telegraph	ISDN TSLRIC study evaluation
August 1996	U-22020 (Direct)	Louisiana	BellSouth Telecomm. Inc.	Avoided retail cost study
Sep. 1996	U-22020 (Rebuttal)	Louisiana	BellSouth Telecomm. Inc.	Avoided retail cost study
Oct. 1997	97-01262	Tennessee	BellSouth Telecomm. Inc.	Unbundled network elements
Oct. 1997	97-01262 (Rebuttal)	Tennessee	BellSouth Telecomm. Inc.	Unbundled network elements